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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/792,056

03/03/2004

Michael J. Otto

154-28553-US

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07/11/2008

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EXAMINER

MCAVOY, ELLEN M

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/792,056	Applicant(s) OTTO ET AL.	
	Examiner Ellen M. McAvoy	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 127-192 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 127-192 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20 May 2008</u> . | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submissions, amendments to the claims and remarks, filed on 13 May 2008 have been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 127-192 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al (5,658,860) alone, or in combination with Chesser et al (6,403,537).

Applicants' arguments filed 13 May 2008 have been fully considered but they are not persuasive. As previously set forth, Clark et al ["Clark"] disclose a well fluid emulsion having a water phase and an oil phase of a sulfurized alcohol and a naturally occurring fat, oil or derivatives thereof. Also disclosed is a method of lubricating drilling equipment used in conjunction with the drilling. Suitable naturally occurring fats and oils may be obtained from vegetable oils such as castor oil, coconut oil, corn oil, cottonseed oil, olive oil and sunflower oil. The preferred class of alcohols are glycols and polyglycols having a molecular weight in the

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range of about 200 to about 2000. See column 3, line 39 to column 4, line 21. Suitable fatty acids include those having a carbon chain length of 8-30 carbon atoms. Clark teaches that derivatives of the fatty acids may be used including alkali metal derivatives. See column 5, lines 37-58. The examiner maintains the position that the drilling fluid of Clark clearly meets the limitations of most of the above rejected claims. Applicants' invention differs in some independent and dependent claims by adding one or more monomers comprising acrylamide. However, Chesser et al ["Chesser"] is added to teach that drilling fluid systems conventionally contain acrylamide monomers. Having the prior art references before the inventors at the time the invention was made it would have been obvious to have added the acrylamide monomers of Chesser to the drilling fluids of Clark if the known imparted properties were so desired. It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, here as drilling fluids, in order to form a third composition to be used for the very same purpose.... "[T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

In response, Applicants amended the independent claims to clarify that the method provides a drilling fluid system comprising a continuous phase comprising as an integral component a dispersion comprising a quantity of insoluble fatty acid soap particles and argued that the examiner has not established that insoluble low valence fatty acid soap particles were known to be useful in drilling fluid systems for any particular purpose. This is not deemed to be persuasive because it is not clear that the "insoluble fatty acid soap particles comprising alkali metal selected from the group consisting of lithium, potassium, rubidium, cesium, and

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combinations thereof” of the claims differ from the prior art to Clark. It has been established that patent claims are read in the light of the specification, and applicants teach in the specification on pages 5-6 that the “fatty acid in the metal soap comprises saturated or unsaturated monocarboxylic acid compounds having the following general structure:



wherein R is selected from the group consisting of alkyl groups and alkenyl groups having from about 10 to about 28 carbon atoms, preferably from about 16 to about 24 carbon atoms”. And that “examples of suitable fatty acids include, but are not necessarily limited to tall oil fatty acids, stearic acids, palmitic acids, oleic acids, and fatty acids derived from castor oil, coconut oil, cotton-seed oil, rice oil, soybean oil, lard oil, rosin acids, tall oils, and the like, and combinations thereof.” As set forth above, Clark teaches that the well fluid emulsion comprises a naturally occurring fat, oil or derivatives thereof, and that suitable naturally occurring fats and oils may be obtained from vegetable oils such as castor oil, coconut oil, corn oil, cottonseed oil, olive oil and sunflower oil. Clark also teaches that suitable fatty acids include those having a carbon chain length of 8-30 carbon atoms, preferably a carbon chain length in the range of about 14 to about 22 carbon atoms, and that derivatives of the fatty acids include alkali metal derivatives. So the examiner maintains the position that the alkali metal derivatives of fatty acids of the prior art reference to Clark meet the limitations of the alkali metal fatty acid soap component of the claims. Although the fatty acid component of Clark is not taught as “insoluble”, the components of the invention and of Clark are seen to be the same so the fatty acids of Clark must also be insoluble.

Applicants argue that the examiner has not pointed to any teaching or suggestion that a dispersion of the claimed insoluble low valence fatty acid soap particles would remain thermally stable at increased temperatures of 250°F (121°C), 300°F (148°C), or even 450°F (232°C) as set forth in the dependent claims. Applicants argue that the examiner has also not pointed to a teaching that the claimed insoluble low valence fatty acid soap particles would react with metal surfaces under appropriate conditions. This is not deemed to be persuasive because the claimed insoluble low valence (meaning alkali metal) fatty acid soap particles of the claims are seen to be indistinguishable from the fatty acid component disclosed in Clark, and Clark also teaches their use as additives to drilling fluids where, during operation in a subterranean well, drilling temperatures presumably reach the same claimed high temperatures. And, as previously set forth, Clark claims in claim 1 that the drilling fluid is contacted with the surface of the drilling equipment “to provide an interface on the equipment surface”.

In regards to the combination of Clark and Chesser, applicants also argue that the examiner has not established that the claims are directed merely to the predictable use of prior art elements according to their established functions; nor has the examiner established an apparent reason to combine known elements in the fashion claimed. As previously set forth, Clark teaches drilling fluid compositions and Chesser teaches drilling fluid compositions. It has been held that it is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, here as drilling fluids, in order to form a third composition to be used for the very same purpose, here as drilling fluids. As recently instructed by the Supreme Court, when a claim defines a combination of elements known in the prior art, the combination must do more than yield a predictable result. *KSR Int’l. Co. v. Teleflex, Inc.*,

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127 S. Ct. 1727, 1740 (2007). Thus the examiner is of the position that it is applicants burden of proof to demonstrate that a drilling fluid composition containing both the alkali metal fatty acid soap of Clark and the acrylamide monomers of Chesser does more than yield the predictable result of a drilling fluid composition containing the attendant functions of each additive.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ellen M McAvoy/
Ellen M McAvoy
Primary Examiner
Art Unit 1797

EMcAvoy
July 9, 2008